LCC-X “Prototype Console Showroom” Presentation

September 25, 1997

STS-86 Launch Configuration

CLCS REDSTONE Delivery

Purpose

- The LCC-X “Prototype Console Showroom” will be used to identify features, characteristics and preferences to be employed in the specification of production CLCS Consoles
- The LCC-X “Prototype Console Showroom” will allow system Users to evaluate the ergonomics and functionality all of the Prototype Consoles and to critique the LCC-X configurations

Purpose (continued)

- The LCC-X “Prototype Console Showroom” will be to demonstrate CLCS functionality threads that were developed for the REDSTONE delivery:
  - Super Light Weight Tank (SLWT)
  - GSE Commanding Pathfinder
  - HMF Pathfinder
  - Simulation Gateway Pathfinder
  - Robust Web Interface Pathfinder

Purpose (continued)

- The LCC-X “Prototype Console Showroom” will be to demonstrate additional functionality being developed and/or demonstrated in conjunction with the CLCS REDSTONE delivery:
  - 3D Visualization Demonstrations
  - New Flat Panel Display Technology
  - Prototype Command Panel (PFP Replacement)
  - Conceptual Demonstrations for the Operational Television (OTV) Replacement System
  - Console Evaluation “OMI”

LCC-X Prototype Console Positions

Console ‘A’ (Mars)

- Used to Demonstrate the CLCS “HMF Pathfinder Thread”
- Dual-Head Command and Control Workstation
- Slaved OTV Displayed as windows in a CRT Monitor
- Enclosure Developed and Built by Evans Consoles of Calgary, Canada

Console ‘B’ (Neptune)

- Used to Demonstrate the “Vivaldi” OTV Concept
- Dual-Head Command and Control Workstation
- Slaved OTV Displayed as windows in a CRT Monitor
- Enclosure Developed and Built by Woodbine Industries of Bensalem, PA

LCC-X Prototype Console Positions

Console ‘C’ (Venus)

- Used to Demonstrate the CLCS “GSE Commanding Thread”
- Dual-Head Command and Control Workstation **AND** Support Workstation using Flat Panel Displays
- OTV Displayed as windows in the secondary monitor of the Support Workstation
- Enclosure Developed and Built “In-House”

Console ‘D’ (Mercury)

- Used to Demonstrate the CLCS “SLWT Thread”
- Dual-Head Command and Control Workstation
- Legacy OTV Diplayed on Dual 9” Monitors
- Additional ‘Wedge’ used to house LCC-X Boot Server
- Enclosure Developed and Built by Infra-Structures, Inc of Brentwood, NY

LCC-X Prototype Support Modules

Support Module #1 (Jupiter)

- Used to Demonstrate the CLCS "Robust Web Interface" Thread
- Contains Color Printer Peripheral
- Enclosure Developed and Built by Infra-Structures, Inc of Brentwood, NY

Support Module #2 (Saturn)

- Used for 3D Visualization Demonstrations
- Used to Demonstrate the CLCS "Simulation Gateway Pathfinder" Thread
- Contains Color Printer Peripheral
- Enclosure Developed and Built "In-House"

Console Evaluation “OMI”

- To best identify User preferences, and to provide objective feedback, an “OMI” procedure has been developed for the LCC-X Prototype Consoles
  - A User (or group of Users) would spend approximately 30 minutes at each console position
  - The User(s) would be that would exercise all of the features of the consoles
  - User(s) will be asked to evaluate the ergonomics, functionality and general aesthetics of all four consoles

LCC-X Console Evaluation Schedule

9/25/97 - 9/26/97

The “Showroom” is open - Initial Demonstrations of LCC-X REDSTONE functionality

9/29/97 - 10/3/97

LCC-X is prepared for Console Evaluation by a large subset of Users

10/6/97 - 10/24/97

LCC-X will be dedicated “full time” for Console Evaluation by Users. The evaluation period may extend one week if deemed necessary.

Users will be able to schedule time for LCC-X Console Evaluations

Production Console Design Panel Schedule

10/27/97 - 11/7/97

Feedback from the LCC-X Console Evaluation is tabulated and analyzed

11/10/97 - 11/19/97

Production Console Specificaiton is prepared from existing CLCS requirements and from LCC-X Console Evaluation feedback

11/19/97 - 11/26/97

Production Console Enclosure Design Panels (Internal and Final)

12/1/97

Release of Production Console Enclosure Specification and “Request for Proposal” to Industry

LCC-X "Prototype Console Showroom" Summary

- LCC-X will be used to demonstrate REDSTONE functionality
- LCC-X will allow the KSC Community to become familiar with CLCS
- CLCS Users are welcome to spend time at LCC-X to evaluate the consoles and to help define our console specification
- The "Prototype Console Showroom" is "open for business" on September 25th